## DEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF HAWAII

In the Matter of the Application of )	PUC Docket 2008-0273	<u>"</u>	2009	
PUBLIC UTILITIES COMMISSION )		IMO3 OITBU	JAN	<u> </u>
Instituting a Proceeding to ) Investigate the Implementation )		AISSI UTIL	26 A	
Of Feed-In Tariffs )			Ω Ö	

### **LIFE OF THE LAND'S**

### **RESPONSE TO PUC INFORMATION REQUESTS #2**

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### **CERTIFICATE OF SERVICE**

HENRY Q CURTIS
VICE PRESIDENT FOR CONSUMER ISSUES

KAT BRADY VICE PRESIDENT FOR SOCIAL JUSTICE

76 North King Street, Suite 203 Honolulu, HI 96817 phone: 808-533-3454

henry.lifeoftheland@gmail.com

#### Aloha Commissioners,

### Appendix A: Cost Data Forms

We defer to renewable energy producers

Appendix C: Questions

Questions 1-4: Answered previously

#### Process and General Feed-in Tariff Issues

5. Please explain the criticality of completing the "best-design" phase of this investigation by March 2009 and having project-based FiTs in place by July 2009 as called for in the Agreement.

The reason for these dates appear to be three-fold: to avoid the usual Integrated Resource Planning vetting process, to overwhelm any potential opposition through the filing of multiple transformational proceedings, and to adopt policies before the Legislature can react.

Historically utilities such as Hawaiian Electric Company (HECO) present their short-range (5 year) and long-range (20 year) plans in a Public Utilities Commission (PUC) Integrated Resource Planning (IRP) docket. However, HECO and the State signed off on the Hawaii *Clean Energy* Initiative (HCEI) Agreement (October 2008) which has not been vetted in any planning proceeding, and which has many moving parts. As a result of the agreement between HECO and the State, the IRP process for HECO, MECO and HELCO has ended. Its replacement is the Clean Energy Scenario Planning (CESP), a largely unknown process that will undergo its first pre-docket step with the creation of a proposed Framework to be filed with the Commission on March 31, 2009. Thus we are currently in a post-IRP pre-CESP time period where there has been no vetting of issues and policies.

During the in-between time, HECO is opening up numerous dockets that promote transformational proposals on a broad scale that will fundamentally change the way numerous issues are handled, including utility rates, utility profits, renewable energy tariffs and penetration levels, energy efficiency, load management, and the establishment of smart grids.

These new programs will use valuable resources (money, regulatory time) that could be used to go to support other alternatives. The new programs and policies will lock the utilities and the regulatory agencies into a new system that will likely last for decades.

HECO wants to fast-track the whole process, and apparently to reverse recent Commission rulings on Distributed Generation, Energy Efficiency, Competitive Bidding and Inter-Governmental Wheeling.

We firmly believe that these dockets should proceed at a pace whereby due process, democracy and transparency are preserved, where unintended negative impacts are minimized, and where the regulatory process is deliberative, reasonable, in the public interest.

## 6. Please explain why project-based FiTs are superior to other methods that require a utility to purchase renewable electricity.

They aren't. FiT are one method of increasing the use of renewable energy. Restructuring the utility through a stock split whereby the utility is split into two separate entities, one owning generation and one owning transmission/distribution, and requiring the latter to prioritize energy purchases queuing renewable energy ahead of fossil fuel would be extremely effective. See: Life of the Land March 1997 Initial Filing in Restructuring Docket 96-0493.

Wheeling, at first limited to Intra-Governmental Wheeling to get rid of the kinks, and then opened up to all forms of wheeling, is another important method. See: (1) Life of the Land Motion to Intervene in Intra-Governmental Wheeling Docket No. 2007-0176; (2) Response of Sun Edison LLC, Hawaii Renewable Energy Alliance, Life of the Land, Puna Geothermal Venture, and RealGreen Power re Opposition to Request to Suspend Proceedings in Docket No. 2007-0176

## 7. Please quantify the costs over avoided costs of an open-ended PBFiT program assuming the utility meets the RPS goals set forth in the Agreement.

Life of the Land has always objected to avoided costs analyses that compare heavily taxpayer subsidized fossil fuel with no offsets for externalities VS renewable energy. A true comparison would account for the negative climate, economic, political, terroristic, environmental, and balance of payments associated with importing fossil fuel VS using low greenhouse gas emission (low climate impact) indigenous renewable resources.

Furthermore, accounting for rate impacts and not tax impacts means accounting for one pocket and not the other of the same group of people. This allows for gaming the system whereby something appears to be good when its costs are switched between pockets.

## 8. Please quantify the benefits of lowering oil imports, increasing energy security, and increasing both jobs and tax base for the state mentioned in the Agreement.

Life of the Land provided numerous national and state studies of these benefits in the Distributed Generation Docket. In addition, these studies appear on our website. See: Selected LOL Exhibits re Economic Studies (http://www.lifeofthelandhawaii.org/HECOs\_Prposed\_2009\_Power\_Plant.html)

9. Is the goal to encourage as much use of renewable resources as possible as soon as possible, or is it to encourage the orderly introduction of renewable resources based upon cost effectiveness?

The goal should be to maximize the use of low greenhouse gas emission (low climate impact) indigenous renewable resources as quickly as possible.

### 10. How long a period should exist between mandatory Commission reviews of the PBFiTs?

This depends on what is initially adopted.

#### **PBFiT General Design Issues**

## 11. Do each of the technologies listed as a renewable resource in the RPS legislation require a PBFiT?

The only exceptions should be those that are really fossil fuel, for example, specific biofuels which are made from primarily from coal. In addition to specific tariffs, the Commission could have a general PBFiT which allows for all other renewable resources which can meet a certain cost.

### 12. Should PBFiTs for certain technologies be established now while others are deferred?

No. The only reasons for establishing some and postponing others is for the state to limit renewable energy penetration and to play favoritism. This approach is unreasonable.

13. Should the Commission cap purchases under PBFiTs? If yes, what is the maximum amount? Should individual caps be set for each technology? What period should the cap cover? What is the measurement for the cap (e.g., dollars, percent of sales, kW, or kWh)?

No. The only reasons for establishing caps is for the state to limit renewable energy penetration. As originally conceived, FiT was designed to maximize renewable energy penetration.

## 14. What limitations exist for integrating renewable resources onto the grid? Should these limits affect the PBFIT design or caps, or are they just another cost that developers must consider?

Not all renewable energy resources are intermittent. All intermittent renewable energy resources can become non-intermittent through a wide range of battery storage systems. Electricity from renewables resources can be combined, that is, the load pattern differs for different renewables and by using a combination the intermittency decreases. The worst thing for the grid is one or two very large intermittent energy sources, and the best is 100s and 1000s of different technologies at different locations.

### Specific Tariff Design Issues

15. How long should the Commission set for the PBFiT's term of obligation? Should it be different for different technologies? Is there a common basis (e.g., a conservative estimate of expected useful life) for establishing the term of obligation? On what basis should a utility pay for electricity after the term expires?

For the present timeframe, we defer to renewable energy producers. As more information becomes available, we may expand our answer.

## 16. Should PBFiTs require the utility to purchase the project's gross or net output at the PBFIT price?

For the present timeframe, we defer to renewable energy producers. As more information becomes available, we may expand our answer.

## 17. How should the utility determine the price paid for renewable energy not covered by a PBFiT (e.g., purchases above the cap or beyond the term of obligation)?

This should be resolved in dockets dealing with non FiT contracts. Otherwise this docket will become quite large.

### 18. What inflation adjustment, if any, should the PBFiT include, using what base and indexes?

For the present timeframe, we defer to renewable energy producers. As more information becomes available, we may expand our answer.

# 19. What milestones (e.g., commercial operations) should the Commission set to determine eligibility for the PBFiT? Are Hawaii's RPS statute requirements an eligibility requirement? Should utility affiliates be eligible to receive the PBFiT price?

This question is important and we will develop a response as the docket moves forward.

## 20. Please comment on the need for stepped tariffs based upon location, size, fuel mix, and output.

The debate that raged at the turn of the century before last (1890-1910) was should we have demand and supply co-located (Edison Model) or should we build generation in remote locations and bring it to load centers with high-voltage overhead lines (Westinghouse Model). The same debate raged within the early computer era (1950-65). With the advent of personal computers and the internet we have moved into dispersed computing. Energy will follow. We already have power plants in our computers and cell phones. Rooftops are a largely under-utilized resource that can

house all sorts of energy systems: solar water heaters, photovoltaic-electric, microwind, rain-micro-hydro.

### 21. Under what circumstances should the PBFiT price be time-differentiated?

Time-of-use rates should become the norm for both supply and demand. Higher rates should exist for both supply (independent power producers) and demand (for ratepayers) for peak loads. At the very minimum, there should be three time-differentiations: peak, shoulder, off-peak, with substantial differences necessary to shave peaks. Combined with the future 2009 docket on electric vehicles which will increase energy consumption during off-peak periods, the object should be to flatten the load and to produce that load with low greenhouse gas emission indigenous renewable energy.

## 22. How highly leveraged (i.e., bearing how much debt compared to equity) are these projects?

For the present timeframe, we defer to renewable energy producers. As more information becomes available, we may expand our answer.

23. Does a PBFiT create a financing environment through a reliable revenue stream from the ratepayer to the investor, allowing for greater leverage and thus lower cost financing than would be available under an avoided-cost tariff?

Yes. For the present timeframe, we defer to renewable energy producers. As more information becomes available, we may expand our answer.

24. If the PBFiTs are to encourage early development of resources, does the reasonable return need to be set higher for these early tariffs? Are there reasons other than encouraging early development to set the profit margin higher, such as risks associated with early implementation? Is this true across all project classes?

The chief reason for using a PBFiT is to increase the certainty that a timely arrangement will occur.

## 25. Does the current "credit crunch" affect the financing costs, including expected profits by equity investors?

The most important concerns for financers is the certainty that the project will be approved and the rate of return. Thus the certainty of a project at a given rate during a recession is better than the traditional 7-year approval or non-acceptance period that has historically occurred in Hawai'i.

### **Related Issues**

26. Please provide a quantitative analysis demonstrating the public interest aspect of the concept that 10% of the utility's purchases under the feed-in tariff PPA should be included in the utility's rate base through 2015. In addition to

the overall prudence of the rate base recommendation, please address the 10% and 2015 date included in the Agreement.

Rate issues associated with PBFiT should be handled in the Decoupling Docket. Rate decoupling is designed to make sure the utility receives reasonable profit while being indifferent to whether the electricity it sells was generated by itself or others, whether it is renewable or fossil, and what weather conditions exist. Hopefully, our decoupling mechanism will favor renewables. It should be in that docket where all rate issues are handled. That is, that should look at rates as a whole, i.e., developing a new rate paradigm. By including rate provisions in multiple dockets, the only real impact, as far as ratepayers go, is total confusion about how rates are set.

27. What is the appropriate rate of return for the PBFiT portion of rate base that consists of a mandated purchase with guaranteed recovery and no capital outlay?

Rate issues associated with PBFiT should be handled in the Decoupling Docket. See answer 26.

28. Are there preferable utility incentives, other than putting PBFiT revenues into the rate base, to encourage the development of renewable resources?

Rate issues associated with PBFiT should be handled in the Decoupling Docket. See answer 26.

29. Should the PBFiT require developers to assign credits (e.g., investment tax credits, renewable energy credits, and carbon credits) earned from a project to the purchasing utility as a condition of receiving payments under the PBFiT? If not, how should these credits be included in the estimation of a typical project's cost?

The utility uses oil to generate virtual all of the electricity that they generate themselves. It seems to us to be unwise to give renewable energy credits to such an entity. Green energy credits should go to green companies not fossil fuel companies.

#### Certificate of Service

I hereby certify that I have this date served a copy by hand delivery of this Response to PUC Information Requests #2 by Life of the Land, in PUC Docket Number 2008-0273, upon the following parties. I have hand delivered the original and 8 copies to the PUC, and two copies to the Consumer Advocate and emailed one copy to each other party listed below.

Dated January 26, 2009

HENRY & CURTIS

VICE PRESIDENT FOR CONSUMER ISSUES